

Abstract

A screw with a heat exchange function is rotatably fit in a barrel, and includes a heat exchange medium chamber located at a center section in the radial direction, running along the lengthwise direction. The chamber stores a heat exchange medium supply pipe supplying a heat exchange medium. The heat exchange medium supply pipe is constituted by split pipes split into two or more sections in the lengthwise direction. Pipe connection joints connect the split pipes with each other while securing such degrees of freedom so that these split pipes can move by predetermined quantity in the lengthwise direction and the radial direction. The screw enables to stably supply a heat exchange medium for a long period without fatigue fracture of a heat exchange medium supply pipe even if the screw is bent during mixing and extrusion of a raw material.